

NAS NORTH ISLAND - NAVY REGION SOUTHWEST NAVY ENVIRONMENTAL LEADERSHIP PROGRAM

COMPLIANCE

WASH RACK WATER RECYCLING SYSTEM

LEAD ACTIVITY

Naval Air Station (NAS) North Island

STATUS

Completed

MISSION

Reuse wash rack discharge water

DESCRIPTION

The wash rack water recycling system (WRWRS) implemented at NAS North Island reuses wastewater generated during vehicle washing at NAS North Island. The WRWRS replaces a wash system that consumed large volumes of water.

The WRWRS combines high-pressure, low-volume, heated pressure washers and a water recycling unit to provide a zero-discharge, self-contained, closed-looped wash rack. The water is collected in a catch basin and pumped above ground to the system where it is filtered, cleaned, and stored in a 500-gallon aboveground storage tank to reuse.



**RGF Wash Rack System Installed at COMNAVAIRPAC
Support Equipment Maintenance Shop**

The wash rack system is unique in that the system operates self sufficiently and is completely self contained, which helps reduce the amount of water used and discharged for vehicle washing. The wash rack system is completely above ground as opposed to the previous underground oil/water separator units, thus eliminating the potential for subsurface contamination.

The cost for the WRWRS is approximately \$29,000, including installation; however, if a concrete pad is not existent, additional costs may be incurred. NAS North Island currently has one WRWRS system in use and is determining volumetric quantities of saved water. The cost savings for this unit are currently being evaluated.

BIBLIOGRAPHY

NAS NORTH ISLAND - NAVY REGION SOUTHWEST NAVY ENVIRONMENTAL LEADERSHIP PROGRAM

- Vendors brochure: "Hydro Engineering" model HE4/2000 EHGV ACE Press
"RGF" model SM2 Ultrasorb Water Recycler

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